The Health of King County:

Many Improvements... Continuing and Emerging Concerns

The Health of King County is a synthesis of public health data designed to provide a broad overview of the health of King County residents. In many regards, we are a healthy county and getting healthier. Important health indicators have improved. Most show that we enjoy better health than the rest of Washington State and the US (perhaps due to the relatively high incomes and educational levels found among county residents). However, to maintain these gains and address ongoing and emerging challenges, continued vigilance and investments are needed.

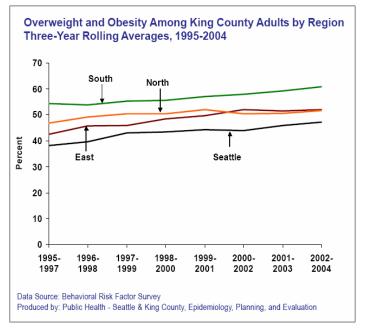
The data used in *Health of King County* are primarily derived from standard public health data systems: vital records, reportable illnesses, hospital discharges, surveys (Behavioral Risk Factor Surveillance System, Healthy Youth Survey) and the US Census. The benefits of using these standard sources include coverage of the entire county population, comparability with state and national data, and availability of historical data to examine trends. However, these data are also limited in the types of health conditions (e.g. data on mental health are inadequate), populations (e.g. data for specific ethnic populations are unavailable) and geographic areas (e.g. data are often not available at the city or neighborhood level) they cover.

The findings of *Health of King County* have many implications for public health practice, delivery of health care, and public policy. However, it is beyond the scope of this report to discuss them. We hope that readers will be stimulated to seek solutions to the issues raised by this report.

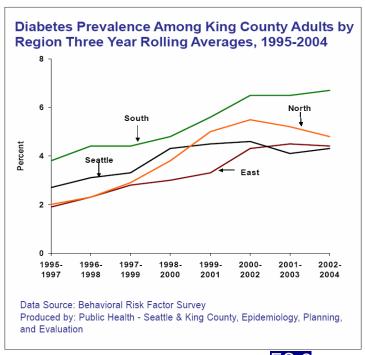
Important Findings of Health of King County

• Chronic diseases such as cancer, heart disease, stroke, chronic lung diseases (including asthma, emphysema and chronic bronchitis) and diabetes are the largest contributors to ill health in King County. These conditions resulted in 21,000 hospitalizations in 2004 at a cost of \$531 million. Cancer, heart disease and stroke alone account for more than half (56%) of all deaths. Asthma affects 9% of adults and 6% of children. Heart disease and diabetes each afflict at least 5% of adults. Arthritis is also common, with 16% of adults having this disease. Because these conditions become more common with age, their impact will increase as the population ages.

Risk factors for chronic diseases are common and affect a growing proportion of the population. Obesity and overweight are increasing: now more than half (54%) of adults are overweight and 18% are obese. Less than half adults report that they are regularly physically active and 14% report no activity in the past month. Only threequarters of youth



engage in recommended levels of physical activity. Hypertension prevalence increased from 18 to 22% (primarily in South Region and Seattle) between 1995 and 2003. The rate of elevated cholesterol among those screened has increased slightly during the same time period (28% to 31%). Environments that promote physical inactivity, poor nutrition and stress contribute to rising rates of obesity, hypertension and diabetes. Among risk factors, only smoking is declining. Currently, 15% of adults smoke.

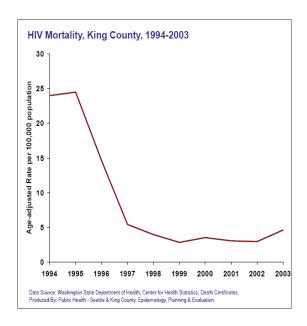


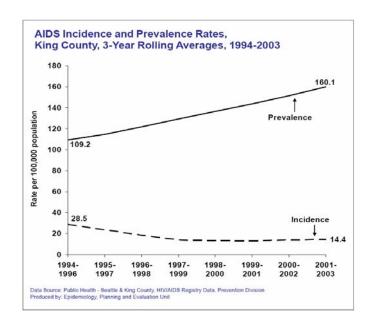
The prevalence of diabetes among adults has doubled in the past decade. Hospitalizations for diabetes, which can often be avoided with planned and proactive diabetes management, are increasing. The diabetes death rate is rising. While we lack surveillance systems for systematically detecting diabetes among children, physicians report



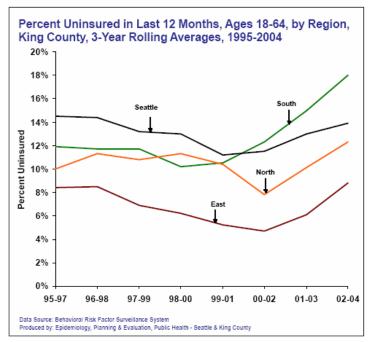
diagnosing Type II diabetes among children with increasing frequency. Type II diabetes is the form associated with obesity and until now has rarely occurred among children.

• HIV infection has now become a chronic condition as HIV mortality has dropped precipitously, leading AIDS to move from the 8th to 14th leading cause of death. Because of improved treatment, increasing numbers of people are living with HIV and AIDS, leading to a steady rise in the prevalence of these conditions. For example, the prevalence of AIDS is 47% higher than it was a decade ago even though there are fewer new cases each year.





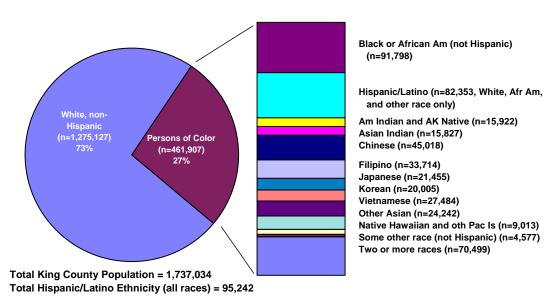
• The risk of an influenza pandemic may be increasing. The severity or exact onset of an influenza pandemic cannot be predicted, but there is a high level of concern among public health authorities worldwide about the potential for a severe pandemic resulting from the widespread outbreak of avian influenza A(H5N1) that is occurring in many countries. Such a pandemic could overwhelm healthcare systems, compromise essential community services, lead to societal disruption, and result in significant economic losses.



Access to health care has declined notably in the past five years, with a record proportion (15.5%) of the population age 18-64 lacking health **insurance** (190,000 people) and a usual source of medical care. This has led to increasing numbers of residents reporting unmet medical needs due to cost and 16,000 hospitalizations per year for avoidable conditions. Limited access to care

translates into poorer health outcomes as opportunities for prevention and effective management of diseases are lost.

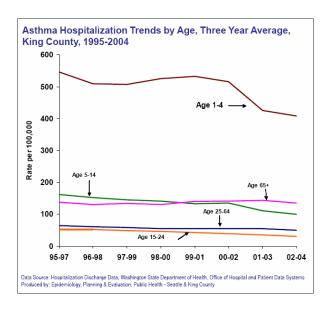
• The increasing diversity of the population suggests that the public health and medical care systems need to address health issues in a growing number of cultural contexts. More of foreign-born people live in the county, especially in Beacon Hill/Georgetown/South Park (where 4 in 10 residents are foreign born) and in Southeast Seattle and White Center/Boulevard Park. The proportion increased in all King County regions. The increase was largest in South Region (from 6.1% to 14.4%) and East Region (from 8.6% to 16.0%).

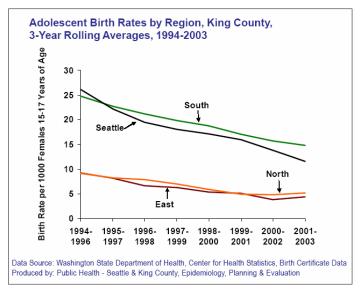


Source: US Census, 1999



- There are large and persistent disparities in health status and access to health care across racial/ethnic groups, income groups and areas of the county. While some disparities are diminishing, many are increasing.
- Investments in health promotion and disease prevention pay off. Asthma morbidity, as measured by hospitalizations, has decreased due to intensive interventions by public health, medical providers, insurers and community organizations. However, the rate remains well above the 1980s level and asthma remains the most common chronic illness of childhood. The rate of low birthweight infants in high poverty areas declined steadily since the mid-1990s and the gap between high and low poverty areas has diminished markedly. The adolescent birth rate has declined substantially. The smoking rate continues to decline.





Improvements

Many health status indicators show improvements. In addition to the favorable trends in HIV, asthma, low birthweight and adolescent birth mentioned above, the report shows that:

• The death rate continues to fall. Residents can expect to live five years longer than they did twenty years ago. Life expectancy in the county exceeds that of the rest of Washington State and the nation. The declining death rate is due to lower mortality from heart disease, cancer, stroke and chronic lung disease.



- Mortality from the most common cancers (lung, colorectal, breast and prostate) is declining.
- Health screening can detect many chronic diseases early in their course, making control or cure possible. Among county adults, 74% of adults report being screened for cholesterol, 82% of women for breast cancer with mammograms, 83% of women for cervical cancer with Pap smears, and 58% of adults for colorectal cancer. The proportion of women receiving mammograms has increased, the proportion of being screened with Pap smears has declined and no changes have occurred in screening for cholesterol and colorectal cancer.
- Smoking rates have steadily declined (except in South Region). While smoking still causes vast numbers of deaths (30% of the total), 15% of adults still smoked in 2004. Smoking among pregnant women has also decreased.
- Motor vehicle injury deaths and hospitalizations are dropping and seat belt use is increasing.
- The epidemic of firearm deaths in Seattle during the early-mid 1990s has reversed and now such deaths are steadily declining.
- Infant mortality is at its lowest rate ever and meets the Healthy People 2010 Objective. However, only the rates for whites and Asian/Pacific Islanders are below this objective. The large decrease in deaths from SIDS was the major contributor to the decline.
- Hepatitis A and B rates have declined dramatically as use of vaccines has grown. Between 1997 and 2004, the number of cases of hepatitis A declined from 441 to 14. Between 1995 and 2004, cases of hepatitis B decreased from 85 to 23.
- The rate of childhood immunizations has increased since 2001, although the current 81% rate of receiving recommended immunizations still falls short of the 2010 Objective of 90%. The rate of immunization against pneumonia among person age 65 and older has increased to 65% but the influenza immunization rate has remained static at 70%. Both rates are well below the 2010 Objective of 90%.
- Outdoor air quality has steadily improved over the past 20 years.
 However small areas continue to have high levels of harmful substances like soot particles or ozone, especially in neighborhoods near highways, industrial areas or train tracks.

Concerns

Despite these improvements, significant health concerns remain. In addition to the concerns regarding diabetes, chronic disease risk factors and access to care described above, additional challenges include:

- Deaths from unintentional injuries have not declined in the past decade except for those related to motor vehicles. After chronic illnesses, they are the most important cause of premature loss of life. They remain the most common cause of hospitalization apart from childbirth.
- The mental health status of residents is not improving. The rate of
 persons reporting frequent mental distress is static, as is the suicide rate.
 Residents report increased poor mental health days. Hospitalizations for
 psychoses are rising. An exception is the decreasing rate of
 hospitalization for depression, which may reflect a growing tendency to
 manage severe depression in outpatient settings.
- Excessive alcohol use is higher in King County than the rest of the state and the nation. The proportion of the population reporting excessive drinking increased from 3.4 to 5.6% over the past decade, and the rates of binge drinking and drinking while driving were static.
- The pattern of drug-related deaths has changed. Deaths from prescription opiates (e.g. oyxcodone) now exceed deaths from heroin; prescription opiate deaths increased four-fold since 1997. Deaths related to prescription depressant drugs (e.g. benzodiazepines such as valium) and methamphetamines are also on the rise.
- Improvements seen in access to timely prenatal care in the early and mid 1990s have ended. Recently, the rate of late or no prenatal care has remained static.
- Poor indoor environmental quality, usually related to substandard or poorly ventilated buildings, is a concerning environmental health issue. For example, 23% of low-income homes have visible mold, as do 16% of all homes in the county. Poor indoor air quality is linked to asthma and allergies.
- The rates of chlamydia and early syphilis (sexually transmitted infections) have increased in recent years.

Health Disparities

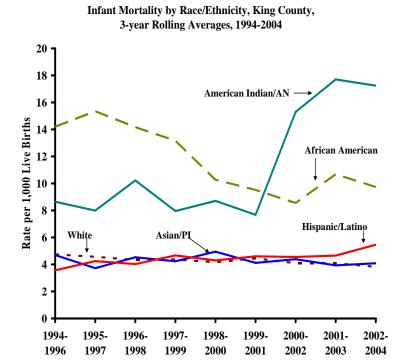
A health disparity is a difference in a health outcome or determinant of health across two populations, such that one population suffers a disproportionate burden of illness. There are large and persistent disparities in health indicators and access to health care in King County across racial/ethnic groups, income groups and areas of the county. While some disparities are diminishing, many

are increasing.

Racial and Ethnic Disparities

When health indicators are compared between African Americans and American Indians/Alaska Natives on the one hand and whites on the other, disparities are found across the spectrum of health indicators, including mortality, birth outcomes, chronic disease and risk factors for chronic disease (e.g. smoking, overweight and physical inactivity, lack of screening), injuries, HIV, mental distress, alcohol use and drug-induced deaths, and access to medical care. Hispanic/Latinos also are affected by disparities, including high rates of adolescent births, physical inactivity, mental distress, HIV, and access to care. In particular:

• Mortality: African Americans and American Indian/Alaska Natives have higher death rates and lower life expectancies. The life expectancy of African American and American Indian/Alaska Native males is the lowest of any demographic groups - about 8 years less than expectancy among white males today and lower than that of white males in 1980. The mortality disparity affecting African Americans did not change over the past decade and it increased among American Indian/Alaska Natives. Each year, 158 fewer African Americans and 37 fewer Native Americans/Alaska Natives would die if the mortality disparity was eliminated.



Data Source: Washington State Department of Health, Center for Health Statistics, Linked birth-infant death files Produced By: Public Health - Seattle & King County, Epidemiology, Planning & Evaluation

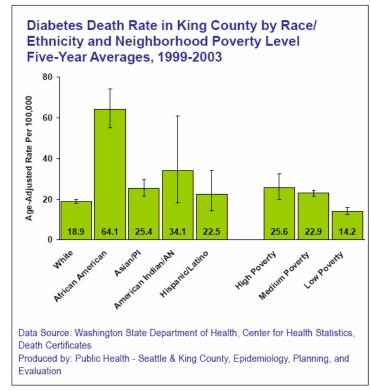
Birth outcomes:

Infant mortality, low birthweight, and preterm deliveries are all more common among African Americans and American Indian/Alaska Natives. While the gaps in these indicators have declined in the past decade, they remain significant. For example, the infant mortality rate among African Americans is declining but remains twice as high as that among whites. **Among American** Indian/Alaska



Natives, the rate is three times that of whites and the gap is increasing. Adolescent birth rates are higher among African Americans, American Indian/Alaska Natives, and Latinas. All people of color have higher rates of late or no prenatal care than whites, but because of important increases of access in the mid 1990s, the gap decreased between 1995-1999.

Chronic disease: Most chronic diseases are more common among African Americans and American Indian/Alaska Natives. For example, African Americans are more than three times more likely to die of diabetes than whites. Heart disease mortality is also higher among African Americans and American Indian/Alaska Natives and, unlike among other ethnic/racial groups, it has not declined over the past decade, leading to a widening gap. Cancer mortality is higher among African Americans and American Indian/Alaska

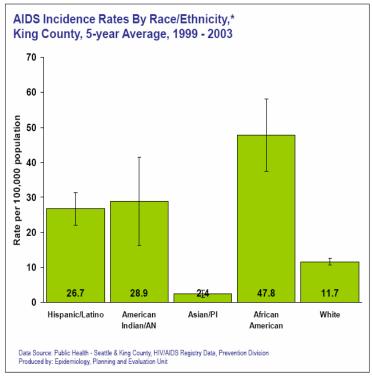


Natives and lower among Asian/Pacific Islanders and Latinos relative to whites.

- Chronic disease risk factors: Smoking rates are highest among American Indian/Alaska Natives and are also high among African Americans, relative to whites. Among adults, higher rates of being overweight are seen among American Indian/Alaska Natives and African Americans while among children, rates are high among African Americans, American Indian/Alaska Natives, Pacific Islanders and Latinos. All people of color have higher rates of physical inactivity. Risk factor disparities may exist because of less access to resources for smoking cessation or physical activity, living in neighborhoods where risk of violence and injury discourages physical activity, or less access to healthy foods due to high cost or availability in nearby stores.
- Screening for chronic diseases: Latinos have the lowest rate of screening for cholesterol while African Americans and Asian/Pacific Islanders also have rates lower than that observed among whites. African Americans receive mammograms less frequently than whites. Screening for cervical cancer is lower among Asian/Pacific Islander women.



 Injury: Unintentional injury mortality is higher in American Indian/Alaska Natives. A dramatic decline in homicide firearm deaths occurred among African Americans over the past decade, leading to a marked narrowing of the gap between whites and African Americans.



- HIV: The disparity in HIV mortality between African Americans and whites increased significantly over the past decade. African Americans are now 3.4 times more likely to die from HIV compared to 1.5 times ten years ago.
- Tuberculosis: The rate of new cases of tuberculosis is 41 times higher among American Indians/Native Alaskans, 24 times

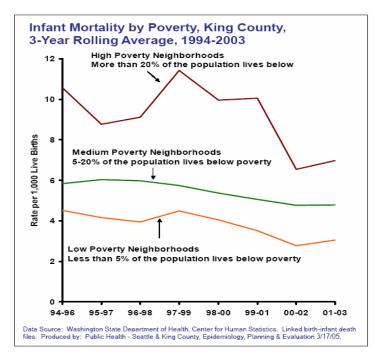
higher among African Americans and 15 times higher among Asians than among whites. Tuberculosis especially affects homeless people.

• **Health insurance and access to medical care:** African Americans and Latinos are more likely to lack health insurance than whites and the gaps have been widening since the late 1990s.

Income Disparities

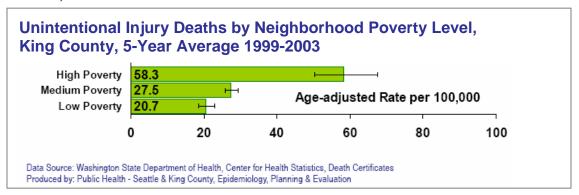
Low income residents also have disparities in health indicators relative to high income residents. Disparities occur in mortality, birth outcomes, adolescent births, all chronic diseases and risk factors (such as physical inactivity, overweight, smoking, and lack of screening), HIV, mental health, alcohol use, drug-related deaths, and access to care. While this report documents disparities across racial/ethnic groups and areas of King County, the largest disparities generally occur between the lowest and highest income groups. For example, new cases of HIV occur *thirteen* times more frequently and unmet health care needs *five* times more frequently among low income residents. Disparities associated with income affect not only residents of high poverty areas. Residents of medium poverty areas are also affected, although to a lesser degree.

- Mortality: The death rate is higher and life expectancy shorter (by 3.4 years) among people living in high poverty areas compared to low poverty areas. The gap between moderate poverty and low poverty areas doubled over the past decade while the gap has not changed for high poverty areas. If mortality in high and medium poverty equaled that of low poverty areas, 1292 fewer residents of low and moderate poverty areas would die each year.
- Hospitalizations: Residents of high poverty areas have a hospitalization rate 43% higher than that of low poverty areas and residents of medium poverty areas have a rate 12% higher. If hospitalizations in high and medium poverty areas equaled that in low poverty areas, approximately 13,000 hospitalizations costing \$109-220 million per year might be prevented.
- Infant mortality is higher in high poverty areas, but the rate in these neighborhoods began declining sharply in the late 1990s. The rates of low birthweight infants and adolescent births in high poverty areas also have declined steadily but remain higher than in low poverty areas.

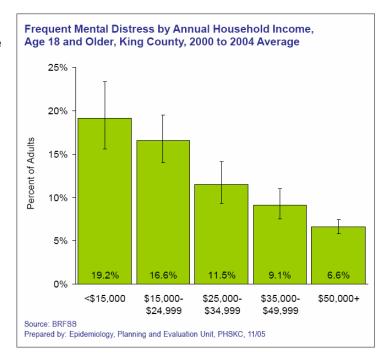


 Injury: Mortality from unintentional injuries is higher in high poverty

areas, due to excess deaths from motor vehicle vs. pedestrian injuries and poisonings. While firearms deaths are still more common in high poverty areas, the rate has decreased.



- Alcohol and drugs: Heavy drinking tends to be more common in lowincome households (but rates of binge-drinking are similar). Drug and alcoholinduced deaths occur more often in high poverty areas.
- Mental Health: Frequent mental distress is more common in lower income households and affects one-fifth of those in lowest income group. Higher suicide death and hospitalization rates are also apparent in high poverty areas.



• Health insurance and access to medical care: Members of the lowest income group are five times more likely to report having unmet needs for medical care. Nearly one-quarter of people with annual household incomes less than \$25,000 report unmet medical needs.

Geographic Disparities

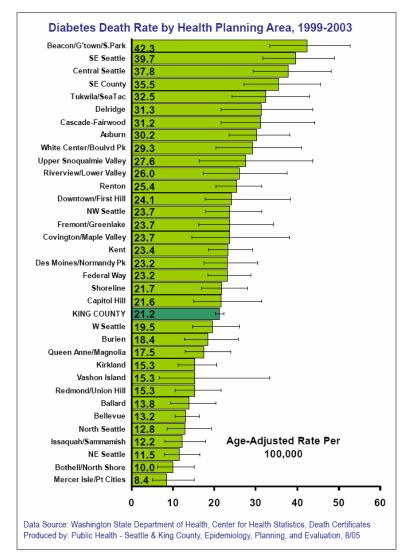
A decade ago, primarily Central and Southeast Seattle were disproportionately affected by poor health. Now, the region of the county experiencing the poorest health has expanded south. The South Seattle/South County Area, which includes Downtown, Central and Southeast Seattle, Beacon Hill, Delridge, White Center/Boulevard Park, Tukwila/Sea Tac, Kent and Auburn, experiences lower health status and more limited access to health care than other regions. This region has:

- The highest death rate and the lowest life expectancy in the county. While the death rate in this region is deceasing, the rate of decline is slower than in other parts of the county.
- Poorer maternal and child health indicators than the rest of the county.
 Infant mortality is increasing only in the South Region and the rate of late
 or no prenatal care in the South Region is not improving as it is in other
 regions. The South Seattle/South Region Area also has the highest rates
 of low birthweight, very low birthweight, preterm delivery, adolescent birth
 and late or no prenatal care.

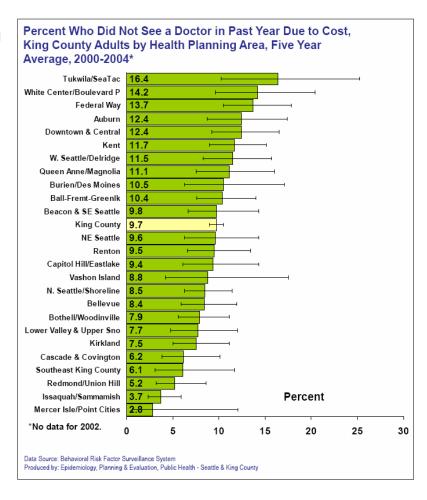
Higher rates of chronic diseases and risk factors. For example, the
prevalence of diabetes is rising most rapidly in South Region and diabetes
mortality is higher. Asthma hospitalizations among children are more
common. The smoking rate has not declined during the past decade as it

has in other regions.

- The highest rates of death from motor vehicle injuries and firearms. It is encouraging to see that the motor vehicle injury rate is decreasing.
- The highest rate of hospitalization for pneumonia and influenza.
- The highest rates of serious mental health problems and health complications from illicit drug use.



The greatest problems accessing medical care. The proportion of uninsured residents is highest in the county and shows the most rapid increase in recent years. More residents report not seeing a doctor because of costs.



Major demographic changes have occurred in the region in the past decade. The largest increases in non-white and foreign born populations and people living in poverty have occurred here, and its residents have the lowest educational attainment. The South Seattle/South County Area crosses political jurisdictions and solutions to its problems will require a regional approach.

Disparities in other areas of the county: Some other areas also have clusters of poor health indicators, although none include such a wide range of conditions as found in the South Seattle/South Area. Southeast County and to lesser extent Federal Way are notable for relatively high rates of chronic illnesses and risk factors for chronic disease, such as deaths from cancer, heart disease and diabetes and risk factors including smoking, physical inactivity obesity, hypertension and uninsurance. Downtown Seattle is notable for its concentration of unintentional injuries, HIV and AIDS cases, mental health problems, drug and alcohol problems (including deaths for liver disease, drug-induced deaths, illicit drug hospitalizations and alcohol-induced deaths) and access to care issues.

Disparities among sexual minorities

- Smoking rates among homosexual and bisexual people are nearly twice as high as among heterosexuals. The same pattern occurs with binge and heavy drinking.
- Breast cancer screening by mammography is completed less commonly among lesbian and bisexual women (50%) compared to heterosexual women (75%).
- HIV and AIDS still predominantly affect gay males, but are slowly increasing in other groups.
- Frequent mental distress is twice as common among sexual minorities as among heterosexuals.

Investments in health make a difference

The observed trends have not occurred at random. In part, they reflect the level of investment by government, community organizations and the private medical sector in addressing health concerns. Public Health – Seattle & King County has made substantial investments which have contributed to:

- Reductions in smoking
- Increased seat belt use
- Improved control of asthma
- · Improved access to prenatal care
- Reductions in infant deaths from SIDS as more infants are placed on their backs to sleep.
- Lower adolescent birth rates
- Increased screening for breast and cervical cancer.

The medical sector has:

- expanded use of effective anti-HIV drugs
- increased screening for early cancers and risk factors for heart disease
- employed state-of-the art treatments for heart disease and cancer.

Continued attention is needed to maintain these gains. While access to prenatal care improved as the result of intensive activities earlier in the past decade, complacency has led to lack of recent progress. Funding for public health asthma control activities is down sharply. In order to address the continuing issue of health disparities and the emerging concerns of diabetes, other chronic diseases, overweight, physical inactivity, pandemic influenza, and mental health, we need to invest in:

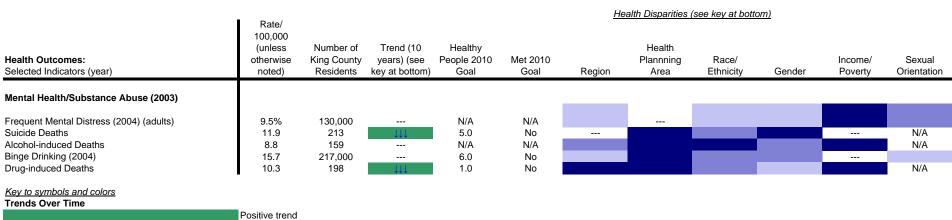
 Implementation of effective community health interventions such as community heath workers, home visits to newborns, care coordination and case management, support groups to encourage physical activity, outreach to increase screening for cancer and chronic disease risk factors, and community education to promote healthy behaviors

- Improvement of the quality of care for chronic conditions, especially among providers who serve populations affected by disparities
- Increasing the ability of people with chronic diseases to self-manage these conditions
- Building homes that provide healthy indoor environments to reduce asthma
- Designing communities which support physical activity
- Making further improvements in air quality
- Making healthy foods more affordable and readily accessible in schools, worksites and communities
- Increasing access to outpatient mental health and substance abuse services
- Assuring universal health insurance coverage and access to health care
- Addressing social factors that affect health, such as unemployment, low wages, lack of educational attainment, inadequate childcare and early childhood education, and discrimination in all forms
- Improving the capacity of community health assessment to monitor trends and disparities.

Health of King County 2006: Summary of Current Data, Trends and Disparities (I)

Health Disparities (see key at bottom) Rate/ 100.000 (unless Number of Trend (10 Healthy Health **Health Outcomes:** People 2010 Plannning otherwise King County years) (see Met 2010 Race/ Income/ Sexual Selected Indicators (year) noted) Residents key at bottom) Goal Goal Region Area Ethnicity Gender Poverty Orientation Population (2000) Living in Poverty 8.4% 142,500 N/A N/A N/A N/A N/A Attended College (age >25) 71.0% 845,100 N/A N/A N/A N/A N/A Foreign Born 15.4% 268,300 N/A N/A Yes Yes N/A N/A N/A N/A $\uparrow \uparrow \uparrow$ General Health Status (2003) Total Mortality 695.7 11.591 N/A N/A N/A Years of Healthy Life Coming Maternal and Child Health (2003) 4.5/1000 Infant Mortality 5.1/1.000 114 No N/A N/A Low Birth Weight 6.3% 1,397 0.1 No N/A N/A ---Very Low Birth Weight 217 Close N/A N/A 1.0% 0.0 Preterm Delivery 9.0% 1.992 N/A 0.1 No N/A N/A Adolescent Birth 321 N/A 10.1 N/A N/A N/A Maternal Smoking N/A N/A 5.6% 1,215 0.0 No Late or No Prenatal Care (2002) 2.3% 436 N/A N/A N/A N/A Chronic Disease (2003) All Cancer Death 172.1 2.816 159.9 No N/A 44.9 Lung Cancer Death 50.5 806 No N/A Colorectal Cancer Death 253 N/A 14.4 13.9 No ---Colorectal Cancer Incidence (2002) 45.5 736 N/A N/A N/A **Breast Cancer Death** 23.2 220 22.3 Close N/A N/A ---Breast Cancer Incidence (2002) 152.5 1,387 $\uparrow \uparrow \uparrow$ N/A N/A N/A Heart Disease 163.7 2.714 166.0 Yes N/A Stroke 57.1 946 48.0 N/A No ---Diabetes Prevalence 70,000 N/A N/A 5.1% $\uparrow \uparrow \uparrow$ N/A N/A No **Diabetes Mortality** 356 N/A N/A N/A 21.8 ---CLRD 32.4 520 N/A N/A N/A Injury (2003) Unintentional Injury Deaths 26.5 478 17.5 No N/A Motor Vehicle Injury Deaths 7.5 136 9.2 Yes N/A Firearm-related Deaths 7.6 140 4.1 No N/A Homicide 3.9 74 3.0 No N/A Communicable Diseases HIV Incidence (2004) 20.4 363 N/A N/A 5,706 HIV Prevalence (2004) 319.1 $\uparrow \uparrow \uparrow$ N/A N/A AIDS Incidence 15.7 280 1.0 No AIDS Prevalence (2004) 178.1 3,185 N/A N/A $\uparrow \uparrow \uparrow$ HIV/AIDS Deaths 5.0 89 0.7 No

Health of King County 2006: Summary of Current Data, Trends and Disparities (I)



Negative trend
Decreasing rate
Increasing rate
Increasing rate
No significant change

Health Disparities: Key to Degree of Inequality

Disparities are statistically significant and the risk ratio of highest to lowest group is:
Less than 2
2 to 3
3 or more

Health of King County 2006: Summary of Current Data, Trends and Disparities (II)

